

Abstract

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Project Title: HTS for HePTP Inhibitors-a leukemia target

Abstract: *DESCRIPTION* (provided by applicant): HePTP is a tyrosine phosphatase expressed in hematopoietic cells and regulates the MAP kinases Erk and p38. HePTP has been found to be overexpressed in leukemic cells and in myelodysplastic syndrome, a preleukemic disorder. This Molecular Libraries Screening Centers Network (MLSCN) Resource Access Award application seeks to have our screen-ready colorimetric 96-well assay for the hematopoietic tyrosine phosphatase (HePTP) used for high-throughput screening (HTS) to identify hits that will be further developed into potent and specific inhibitors of HePTP. These inhibitors will primarily be used for basic research into the mechanisms of signal transduction and MAP kinase regulation, but may also become useful for treatment of hematopoietic malignancies (e.g. acute myeloid leukemia) where HePTP has been reported to be overexpressed.

Thesaurus Terms:

High-throughput screening, HePTP, tyrosine phosphatase, hematopoietic cells, MAP kinases, Erk, p38, leukemic cells, myelodysplastic syndrome, preleukemic disorder, MLSCN, assay, signal transduction, MAP kinase regulation, hematopoietic malignancies, acute myeloid leukemia

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